The management of organizational culture in organizations with advanced technology and excellence

Dr. Amal Nik¹, Amir Mohammad Aleyamin²

1. Associate professor and research assistant, Faculty of Engineering, University of Tehran, Tehran, Iran
2. MA student in executive management, University of Tehran, Tehran, Iran

Abstract: This study has investigated the management of organizational culture in organizations with advanced and excellent technology. The statistical population of research has been the case study of managers and experts of Aviation Industries Organization and in total the sample size used in this study is through Cochran's formula 88 people in the period 2016. The method used in this research is descriptive survey method from the type of applied and correlation that for this purpose, a questionnaire is prepared and distributed among the sample. The data was collected and as the reference of data was classified in an Excel file. The hypothesis testing was performed using the software Spss21. The results showed that there is a positive and significant relationship between the dimensions of excellence (leadership, policy and strategy, employees and key performance results) of organizations and management of organizational culture in the confidence level of 5 percent (95%). There is a positive and significant relationship between the dimensions of excellence (partnerships and resources, employees' results) of organizations and management of organizational culture at the confidence level of 90% and there isn't a significant relationship between the dimensions of excellence (processes, customers' results, and community result) of organizations and management of the organizational culture. There is also a significant and positive relationship between the promotion of IT in the organizations and management of organizational culture.

Key word: Organizational culture, the management of organizational culture, excellence of organization

Introduction

In today's world, along with developments and significant changes that occur in various aspects of economic, social and technologic, profound changes occur in the methods and new management systems. Among the new concepts that today has found an important place in many countries throughout the world. One of the main problems in many developing countries is cultural and psychological challenge with new technologies that usually a part of people show negative responses against changes that this issue could delay the appropriate use of them. Therefore, education and cultural development of using new technologies is one of the important issues in the development of the IT that its related problems should be identified and resolved (Shaeidi, 2011) and strict attention is paid that decision-making in the field of information technology and using hardware and software requires the identification of cultural backgrounds (Roshandel and Saber, 2013) Also obtain a comprehensive and accurate picture of the organization in all dimensions for governance and planning has great importance and the development of coherent and reliable mechanism such that provide the existing realities in the organization appropriately for managers decision is considered as the needs for efficient and effective management (Khaleghi and Haj Karimi, 2011). Planning and implementation of business excellence models and awards is quality. Organizational excellence models are considered comprehensive and accurate tool to measure organizational performance in all areas related and the inclusion of all stakeholders, and provide an overview of the organization's overall performance (Grigg and Mann, 2008). The main objective of this study is to investigate the management of organizational culture in organizations with advanced and excellent technology in the aviation industry organization. The aviation industry organization is one of the organizations affiliated to the Ministry of Defense of the Islamic Republic of Iran. It is not only the main center of decision-making and policy-making in matters relating to aviation industry but as a strategic organization which is able to strategic long-term planning as well as the medium-term plans for the purchase and sale of fixed-wing aircraft and helicopters and aircraft engines is also considered. Aviation Industries Organization by utilizing the capabilities of companies and sub-industries is capable to design and manufacturing of aircrafts, heavy and semi-heavy repairs and support existing aircraft equipment.¹ The practical and functional necessity of results of this research can be generally considered the effect of Organizational Culture Management on every dimension of organizations with advanced technology and excellence in the aviation industry organization. In continuation, review of the literature, the framework of designed concept for this research, applied research and investigate hypotheses considered will be investigated.

Theoretical framework of research

The concept of organizational culture

Experts and specialists in various fields of management have provided different definitions and explanations in the case of organizational culture that each shows approach and their specific views in this regard. From the perspective of Edgar Schein, organizational culture represents a set of common fundamental assumptions that organization members in
resolving issues related to the internal integration and external compliance has learned. This framework or model is valid so that learns to employees the correct way to perceive, think and feel about the organization issues (Schein, 2010). In addition, organizational culture is a multidimensional concept, its analysis and evaluation requires attention and reflecting on all aspects of the concept. In other words, Schein considers organizational culture as a system of beliefs and shared values of growth and often it manifests at the levels of behaviors and human artifacts, values, beliefs and assumptions underlying. Importance of organizational culture to scholars such as Schein is to the extent that he considers the first duty of leader in the creation of group and organization, creation of a dynamic and positive organizational culture (Ghahramani, in 2010, Rahimi and Moradi Sara, 2016).

Management of organizational culture

Management of organizational culture is a process that during it continuously has identified the existing culture and favorable organizational culture and it is acted in order to change the existing culture and develop values and desirable behavioral patterns. This process is also under the influence of external environment of organization. Management of organizational culture is the most important tasks of leaders of organization and according to it, the leader identifies core values and desirable components of organizational culture and change and development of components in the organization. People like Chesterbarnard, Philip Selznick, Peters and Waterman argue that the basic task of management is to form and guide fundamental values of organizational culture. In fact, the fundamental role of leaders of the organization is the management of values in organization (Pahlavan Sadegh, 2014).

The excellent organization

The excellent organization is an organization where learning culture, education, innovation and continuous improvement have been institutionalized. In such organizations, education has a superior position and employees train in the organization's growth path and convert their knowledge to skill and transfer their skill for increasing creativity and innovation to others.

The central concepts of organizational excellence

The excellent organizations, with adherence to the value principles of organizational excellence and in their continued movement toward excellence manifest evidence of objectification of the central concepts of organizational excellence in the scope of the organization. The organizations using the organizational excellence model, the more progress toward excellence path, core concepts of organizational excellence will be more prosperous in them. These concepts include (Jelodari Mamaghani, 2008):

Idealistic leadership
Achieving balanced results
Value creation for customers
Process and decision- making based on fact
Appreciation of human capital
Development of Partnerships
Social Responsibility
Learning, creativity and innovation

Idealistic leadership

Excellent organizations are leaders who by determining the general direction of the organization depict future and to achieve the organization's goals share key stakeholders and provide their needs, and by the flexibility and understanding of key business motive make appropriate decisions and if necessary, revise and modify the orientation and objectives of the organization. Leaders of these organizations with playing role as a pattern inspire employees, preserve values and ethical principles and are committed to their social responsibilities and create a culture that by learning, innovation, ethical behavior, accountability and organizational development make possible achieving sustainable outcomes for the organization through new methods.

Achieving balanced results

Excellent organizations identify and understand key results and a balanced and prioritized set of results that meet short-term and long-term needs of stakeholders or beyond their needs and based on them determine and implement strategies and policies. These organizations, with the understanding causal relationships and using effective mechanisms in risk management, through planning, definition of performance indicators and achievements, performance evaluation, comparison, providing information that is underlying effective decisions of their leaders and transparency in reporting to stakeholders realize achieve strategic goals and progress toward view (Hassanzadeh and Rashnavady, 2008).

Value creation for customers

Excellent organizations consider customers as the main reason for themselves and based on their capabilities try to understand and predict their needs and expectations. These organizations attracts active participation of customers to
develop products, services and new and innovative experiences and by using mechanisms for enhancing customers experience and its monitoring, establish a dialogue based on openness, transparency and accountability quickly and effectively to any feedback, comparison and benchmarking of successful experience try to create value and innovation for customers.

**Process and decision-making based on fact**

Excellent organizations to create value for stakeholders and achieve balanced and sustainable results, through structured processes and in line with the strategies which are beyond organizational boundaries and to identify risks and make decisions based on facts are managed. These organizations, to provide the optimum balance of efficiency and effectiveness define significant indicators for performance of related processes and outcomes and by measurement, analysis and interpretation of them identify innovation opportunities and involve their employees in the review, improvement and continuous optimization of processes of organizations actively.

**Appreciation of human capital**

Excellent organizations know skills and competencies needed to achieve the mission, vision and strategic goals and by appreciating human capital create a culture in the organization in which the skills, talents and creativity of developed employees and their ability to achieve organizational and personal goals to be improved. These organizations foster organizational development through shared values, accountability, ethics and culture of trust and openness, individual and team goals are aligned with the organization's strategic objectives, the management of diversity and work-life balance responsibly reassure that employees use all their ability in a real environment of partnership to be shared in their continued success and organization and be the ambassador of organization's success.

**Development of participations**

Excellent organizations identify their strategic partners, including customers, society, key suppliers, educational institutions and non-governmental organizations on the organization's strategic needs, complementary strengths and capabilities and to achieve lasting success and bilateral search, create and maintain relations based on openness, mutual respect and trust. These organizations have found that success depends on effective partnerships and by creating extensive networks of partners provide the possibility to identify potential partnership opportunities and reinforce capabilities and the organization's ability to create value for stakeholders, and for achieving common objectives and mutual benefits, by the sharing of expertise, resources and knowledge support each other.

**Social responsibility**

Excellent organizations adhere to maintain moral values and compliance with laws and regulations and ensure organizational behavior based on the highest ethical standards and personnel integrity, ensure the safety and health at work and on the stakeholders and range of society are transparent, accountable and responsible. These organizations move beyond the legal requirements, in public affairs and charitable and pious activities to help the poor and the needy people of community have an active role, in the use of resources think the interests of future generations and consider consequences obtained of operations and product life cycle and their services on health, safety and environment, and in dealing with conflicts pay attention to economic stability, social and environmental.

**Learning, creativity and innovation**

Excellent organizations create value through continuous innovation and systematic and guided by creativity of their stakeholders, and improve their performance. The organizations determine goals and clear strategies for innovation and by using approaches and to build networks for active interaction of employees, partners, customers, and society and culture of entrepreneurship identify opportunities for creating ideas and innovations inside and outside and to finding new ways to create value for customers manage new methods of doing work, create new partnerships, efficient use of resources and competencies, innovation in all aspects of the organization (Homayounfar, 2010).

**Dimensions of cultural typology and technology acceptance**

In recent decades, information technology is almost concerned with every aspect of life, especially professional and career life of human. Application of information technology in various fields and rapid growth of using computers in organizations is given a special importance to assess the level and factors of acceptance and rejection of information technology in organizations (Ghorbanizadeh et al., 2013). In our country, although steps are taken in the application of information and communication technology in various fields, but this is still unknown. If we consider management a systematic action to achieve the organization's objectives, the role of information technology in the design of the system and to achieve the targets are well explained (Bahri et al., 2010). Currently, information technology is an important factor in improving productivity and organizational performance. Use of information technology in particular is essential for the successful performance of today's organizations (Shaukat and Zafar, 2010). Among all the factors that must be considered
in the adoption of information technology, culture is probably the most difficult factor to analyze, define and measure (Cardon and Marshall, 2008).

Al-Ghafan et al. (2007) examined the impact of organizational culture on admission of Unified Theory of Acceptance and Use of Technology (UTAUT) and assessed cultural differences that accepting using information technology in both North America and Saudi Arabia's population is affected and provided a model in which the Western societies were not reliable. They fund a positive effect between performance expectancy and its intention, but there wasn't any effect of the interaction between performance expectancy and age and sex. Negative interaction between hope to try and experience in planning to do work, showed that with increasing years of experience with computer work, the ease of using it in predicting the behavior and intentions of the Saudi people is less important. They argued that in Saudi Arabia due to power distance, people more tend to show respect to authority and meet the expectations of others in superior in important roles.

Review of research literature and develop hypotheses

Goudarzvand and Chegini (2015), showed that among the components of organizational culture including performance expectancy, effort expectancy, and subjective norm and facilitate conditions, only there was a significant relationship between performance expectancy and facilitate conditions with behavioral tendency and using computer although, gender not showed a relationship with cultural components and using computer. Mario and Andrea (2013), the results showed that organizational culture is effective on unified communications and technical cooperation in the organization and well integrated theoretical model of acceptance and the use of technology as one of the major factors for technology adoption in large organizations was confirmed. The results of Suellen et al. (2014), explained how layers of organizational culture; especially the norms and creative practices moderate partly innovation ideas that support the performance of the company. Macintosh (2010), in its investigation has shown on the positive impact of organizational culture on promoting organizational excellence and stipulates that university managers should not lose training opportunities for growth and promote dynamic organizational culture.

Given the above, the independent variable in this study is the dimensions of excellence and upgrade technology in organizations and dependent variable is management of organizational culture, as well as hypotheses investigated is defined as follows:

The main hypothesis

There is a significant relationship between the dimensions of excellence and the promotion of IT in the organizations and management of organizational culture.

Hypothesis 1-1: there is a significant relationship between the dimensions of excellence (leadership) of organizations and management of organizational culture.

Hypothesis 1-2: there is a significant relationship between the dimensions of excellence (policy and strategy) of organizations and management of organizational culture.

Hypothesis 1-3: there is a significant relationship between the dimensions of excellence (employees) of organizations and management of organizational culture.

Hypothesis 1-4: there is a significant relationship between the dimensions of excellence (partnerships and sources) of organizations and management of organizational culture.

Hypothesis 1-5: there is a significant relationship between the dimensions of excellence (process) of organizations and management of organizational culture.

Hypothesis 1-6: there is a significant relationship between the dimensions of excellence (customers' results) of organizations and management of organizational culture.

Hypothesis 1-7: there is a significant relationship between the dimensions of excellence (employees' results) of organizations and management of organizational culture.

Hypothesis 1-8: there is a significant relationship between the dimensions of excellence (community's results) of organizations and management of organizational culture.

Hypothesis 1-9: there is a significant relationship between the dimensions of excellence (performance key results) of organizations and management of organizational culture.
**Hypothesis 1-10:** there is a significant relationship between the promotion of technology in organizations and management of organizational culture.

Methodology

This study is a survey research that is the most commonly quantitative research in research and in terms of the nature is applied and in terms of the time is cross sectional. The population of this research is managers and experts from the aviation industry in 2016 that is about 115 people. For sampling, stratified random method was used. Which means the share of the various spheres of the population was specified and in the same proportion of sample, share was allocated to them. The sampling was done randomly from the classes. The sample size was calculated using Cochran formula and 88 people was obtained.

The formula used to estimate the sample size is as follows:

\[ n = \frac{Nt^2 . p (p - 1)}{Nd^2 + t^2 . p (p - 1)} \]

- \(N\): Population size (size= 115)
- \(t\): The number of standard error (reliability = 1.96)
- \(d\): Potential desirable accuracy (probable accuracy = 0.05)
- \(p\): desirable probability (probability = 0.5); \(q\): undesirable probability (probability = 0.5)

Data collection tool and analysis of data

To gather the theoretical bases of information about literature research, library and documentary studies were used. One of the main methods for data collection in this study is the library method. So that the theoretical arguments about the need for research was collected of related resources, including books, articles, theses and also the resources available in databases and libraries of universities and higher education institutions. In this study, a questionnaire was used to collect data. The assessment of research variables was designed based on five-points Likert and were scored from strongly agree to strongly disagree.

Reliability of research tool

Cronbach's alpha was used to estimate the validity of the questionnaire. Cronbach's alpha is considered a measure of the reliability of research tools and determines the correlation of internal tools of research. Reliability (Cronbach's
alpha) is a function of the number of questions in the questionnaire divided by the heterogeneous sample in response to questions (Momeni and Faal Ghaicyoomi, 2011). Figure 2 shows the reliability test results for each category of variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's alpha</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research questionnaire</td>
<td>0.867</td>
<td>Confirm the reliability</td>
</tr>
</tbody>
</table>

The following information using Excel software in reference frame, data were collected. Hypotheses testing method in this study is data using spss21 software. Tests used are as follows.

**Correlation and regression analysis**
For approving first and second research hypothesis, correlation and regression test was used.

To study the linear correlation of variables, Pearson correlation coefficient (for normal distributions) and Spearman (abnormal distributions) can be used. Correlation is a measure to determine the relationship between two variables, usually used with regression analysis.

**Analysis**

**Demographic Statistics**

<table>
<thead>
<tr>
<th>Education</th>
<th>Associate degree and higher</th>
<th>7</th>
<th>0.08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BA</td>
<td>12</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>MA and higher</td>
<td>69</td>
<td>0.78</td>
</tr>
<tr>
<td>Age</td>
<td>20 to 30</td>
<td>21</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>31 to 40</td>
<td>28</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>41 years and up</td>
<td>19</td>
<td>0.22</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>86</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>2</td>
<td>0.02</td>
</tr>
<tr>
<td>Job experience</td>
<td>5 years and less</td>
<td>19</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>5 years to 10 years</td>
<td>32</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>10 years to 15 years</td>
<td>18</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>15 years and more</td>
<td>19</td>
<td>0.22</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

According to Figure 2, almost 24 percent of respondents are in the age group 20 to 30 years, 54% in the age group 31 and 40 years and almost 22% in age group 41 years to up. Also education of respondents is as this that 8% of respondents have associate degree and lower, 14 percent of respondents are BA, and nearly 78 percent are in the group of MA and higher. According to the above image almost 2 percent of the respondents were female and 98 percent were male. Also, 22 percent of respondents have work experience of 5 years or less, 36% have work experience of 5 to 10 years and 42 percent have work experience of 10 years to up.

**Normality of distribution of responses**
In this study, to test the normality of distribution of responses related to each factor, Kolmogrov- Smirnov test was used. This test is used to verify the claims made about the normality of distribution of data of a quantitative variable. Statistical assumptions in this test are as follows:

$H_0$ : Data distribution is normal.
$H_1$ : Data distribution is not normal.

If approved (ie $p-value > 0.05$) distribution of deviations is normal (Momeni and Faal, 2011). The results of this test in Figure 3, is as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kolmogrov- Smirnov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of organizational culture</td>
<td>0.990</td>
</tr>
<tr>
<td>Dimensions of excellence of organizations</td>
<td>0.788</td>
</tr>
<tr>
<td>Promote technology in organizations</td>
<td>0.945</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of organizational culture</td>
<td>0.281</td>
<td></td>
</tr>
<tr>
<td>Dimensions of excellence of organizations</td>
<td>0.564</td>
<td></td>
</tr>
<tr>
<td>Promote technology in organizations</td>
<td>0.334</td>
<td></td>
</tr>
</tbody>
</table>

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According to information in the above table, Kolmogorov-Smirnov test result is not significant for any of the variables studied, so the distribution of variables is normal.

**Inferential statistics**

**Pearson correlation tests**

Following the partial correlation between the variables will be investigated.

![Figure 4: Matrix of correlation coefficients between variables](image)

According to relevant images, it can be said that the dependent variable of management of organizational culture has a significant positive correlation (P-Value < 0.05) with independent variables. The correlation between the dependent variable and the independent variable of dimensions of excellence of organizations is 80% which has the highest correlation.

**Prove the hypotheses**

**Investigate the relationship between dimensions of excellence of organizations and management of organizational culture**

To test the hypotheses 1-1 to 1-9, the regression equation is defined as follows:

\[ Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} + \epsilon_i \]  

(Model 1)

![Figure 5: Partial regression coefficient: the dependent variable of management of organizational culture](image)

In the results of the regression analysis, the variables with a significant influence on the dependent variable are:

- Leadership
- Policy and strategy
- Employees
- Participations and sources
- Processes
- Customer results
- Employees results
- Community results
- Performance key results

The null hypotheses are rejected for all independent variables, indicating that these variables significantly influence the dependent variable.
Before the research hypothesis test based on the results obtained, we must ensure the accuracy of the results. For this purpose, to determine the significance of the total model, F-test was used. According to the probability statistic of F calculated (0.000), it can be argued that the fitted regression model is significant. By examining the coefficient of determination, it is considered the obtained value (0.341) indicating the accuracy of the fitting model and adjusted coefficient of determination states that independent variables in the model can be partly explained 29% of variability of dependent variable of management of organizational culture. Also according to the preliminary results of the model, Durbin-Watson statistic was equal to 1.789 and since is between 1.5 and 2.5, it can be concluded residuals are independent of each other and model not has the trouble of correlation between components of distributing. Following, we investigate the hypotheses of the research:

**Hypothesis1-1** states that there is a significant relationship between the dimensions of excellence (leadership) of organizations and management of organizational culture. Coefficient and statistics probability of independent variable of leadership in above figure indicate a significant positive relationship between the dimensions of excellence (leadership) organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.000), less than 0.05 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (leadership) organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Hypothesis1-2**: there is a significant relationship between the dimensions of excellence (policy and strategy) of organizations and management of organizational culture. Coefficient and statistics probability of independent variable of policy and strategy in above figure indicate a significant positive relationship between the dimensions of excellence (policy and strategy) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.036), less than 0.05 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (policy and strategy) organizations and management of organizational culture, in other words, in 93% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Hypothesis1-3**: there is a significant relationship between the dimensions of excellence (employees) of organizations and management of organizational culture. Coefficient and statistics probability of independent variable of dimensions of excellence (employees) of organizations in above figure indicate a significant positive relationship between the dimensions of excellence (employees) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.001), less than 0.05 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (employees) of organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Hypothesis1-4**: there is a significant relationship between the dimensions of excellence (participations and sources) of organizations and management of organizational culture. Coefficient and statistics probability of independent variable of dimensions of excellence (participations and sources) of organizations in above figure indicate a significant positive relationship between the dimensions of excellence (participations and sources) of organizations and management of organizational culture on the error level of 0.10. Because the Sig (significance) calculated for the independent variable coefficient (0.073), less than 0.05 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (participations and sources) of organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Hypothesis1-5**: there is a significant relationship between the dimensions of excellence (processes) of organizations and management of organizational culture. Coefficient and statistics probability of independent variable of dimensions of excellence (processes) of organizations in above figure indicate lack of significant positive relationship between the dimensions of excellence (processes) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.515), more than 0.05 is obtained. So it can be said that there is no significant positive relationship between the dimensions of excellence (processes) of organizations and management of organizational culture, and represents that the hypothesis is not confirmed.

**Hypothesis1-6**: there is a significant relationship between the dimensions of excellence (customer's results) of organizations and management of organizational culture.
Coefficient and statistics probability of independent variable of dimensions of excellence (customer's results) of organizations in above figure indicate lack of significant positive relationship between the dimensions of excellence (customer's results) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.879), more than 0.05 is obtained. So it can be said that there is no significant positive relationship between the dimensions of excellence (customer's results) of organizations and management of organizational culture, and represents that the hypothesis is not confirmed.

**Hypothesis 1-7:** there is a significant relationship between the dimensions of excellence (employees' results) of organizations and management of organizational culture.

Coefficient and statistics probability of independent variable of dimensions of excellence (employees' results) of organizations in above figure indicate a significant positive relationship between the dimensions of excellence (employees' results) of organizations and management of organizational culture on the error level of 0.10. Because the Sig (significance) calculated for the independent variable coefficient (0.059), less than 0.10 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (employees' results) of organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Hypothesis 1-8:** there is a significant relationship between the dimensions of excellence (community results) of organizations and management of organizational culture.

Coefficient and statistics probability of independent variable of dimensions of excellence (community results) of organizations in above figure indicate lack of significant positive relationship between the dimensions of excellence (community results) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.118), more than 0.05 is obtained. So it can be said that there is no significant positive relationship between the dimensions of excellence (community results) of organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is not confirmed.

**Hypothesis 1-9:** there is a significant relationship between the dimensions of excellence (performance key results) of organizations and management of organizational culture.

Coefficient and statistics probability of independent variable of dimensions of excellence (performance key results) of organizations in above figure indicate a significant positive relationship between the dimensions of excellence (performance key results) of organizations and management of organizational culture on the error level of 0.05. Because the Sig (significance) calculated for the independent variable coefficient (0.049), less than 0.05 is obtained. So it can be said that there is a significant positive relationship between the dimensions of excellence (performance key results) of organizations and management of organizational culture, in other words, in 95% there is a positive and significant relationship between variables investigated and represents that the hypothesis is confirmed.

**Investigate the relationship between the promotion of technology in the organizations and management of organizational culture**

To test this hypothesis 1-10, null and one hypothesis is defined as follows:

H0: there is no significant relationship between of IT in the organizations and management of organizational culture.

H1: there is a significant relationship between of IT in the organizations and management of organizational culture.

To prove this hypothesis, correlation test and linear regression between the two variables is used, the results are as Figure 6:

| Correlation Coefficient (R) | 0.667 |
| JR Square | 0.391 |
| Adjusted R Square | 0.327 |

It is observed that the correlation coefficient approximately is obtained equal to 67% and 39% coefficient of determination and adjusted coefficient of determination, approximately 33%. According to the coefficient of determination can be expressed that technology upgrade in organizations approximately explains 39% of management of organizational culture.

In order to provide the regression, the regression equation is defined as follows:

\[ Y_i = \beta_0 + \beta_1 X_{it} + e_{it} \]

(Model 2)
Since according to the difference of units of each variable that subsequently alter the units of partial regression coefficients, we express regression equation using standardized variables as follow. In this case, we can understand the effect of variable; using the figure 7, can be investigated significant level for the variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-standard coefficients</th>
<th>B</th>
<th>Std. Error</th>
<th>t value</th>
<th>Sig At the error level of 5 and 10 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix value</td>
<td></td>
<td>2.996</td>
<td>0.446</td>
<td>6.712</td>
<td>0.000</td>
</tr>
<tr>
<td>Promote technology in organizations</td>
<td></td>
<td>0.329</td>
<td>0.146</td>
<td>2.257</td>
<td>0.029</td>
</tr>
</tbody>
</table>

As can be seen in the image above, the coefficient estimated and t statistics related to updating technology in organizations is positive and at the 5% error level is significant. This hypothesis 1-10 is confirmed at the error level of 5 percent. So it can be said there is a significant positive relationship between the promotion of IT in the organizations and management of organizational culture.

**Conclusion**

Today’s world is full of complexities that have faced organizations with many problems in the field of growth and excellence and faced planners and managers, organizers and leaders with great challenges. Organizations must have a plan, it means that they should determine their goal and defines policy based on it. All applications must be done as chain, when the leadership of the organization plan a program, all employees from the highest to the lowest level should investigate applications. Then, in a true partnership should define and implement useful programs and through defined processes for each application should move. Now most organizations have concluded that their management must be based on processes to all members obey it. Studies show (Feiz, 2015) culture affects objectives and strategies, individual behavior and organizational performance. If managers are seeking to change productivity and organizational performance, they should be aware of component elements of organizational culture and their change. Organizational culture change is the most important and most difficult step in the process of management of the organizational culture. Ways to change organizational culture are seeking to change within that emphasize the awareness, knowledge of people, or following change of external that focus on creating an environment and new working conditions. After testing hypotheses, the results showed there is a significant positive correlation between the dimensions of excellence (leadership, policy and strategy, employees and key performance results) of organizations and management of organizational culture at the error level of 5 percent (95%). There is a significant positive relationship between the dimensions of excellence (partnerships and resources, employees results) of organization and management of organizational culture at 90% confidence level and there is no significant relationship between the dimensions of excellence (processes, customers results, and community results) of organizations and management of the organizational culture. As well as there is a significant positive relationship between the promotion of IT in the organizations and management of organizational culture.

Goudarzyand and Chegini (2015), showed that there was a significant relationship among the components of organizational culture and computer use. Mario and Andrea (2013), the results showed that organizational culture has an impact on the unified communications and collaboration of technology in organization. Also Makvantaj (2010), in his study showed the positive impact of organizational culture on promoting organizational excellence in universities. In other words, one of the concerns of society and in all organizations is organizational excellence, of course, providing an organization that has all the features mentioned at the same time looks slightly out of access. Because converting from a traditional organization to an excellent organization and with superior performance is so long and managers are faced with different challenges on the way.

**Applied proposals of research**

With respect to important aspects of the aviation industry organization for the country is recommended to assess the weaknesses in leadership style and organizational excellence and in other words, it seems that policy in the field of research and detailed look of senior managers is effective and useful.

It is suggested that by the formation of knowledge-based companies in order to engage with partners and the development of resources to achieve performance key results, special measures to be taken.

Also it is recommended by the opening of the Fund and Defenders of students and following it, the use of projects and research and practical activities steps to be taken to improve all aspects of the aviation industry organization.

**Limitations of the study**

Scientific research is often restricted that damage to the stability and reliability of findings of research and makes trouble its generalizability. The present research is not exempt of these cases and including restrictions governing it can be referred the following cases:
Bottlenecks in selecting the sample and lack of easy access due to statistical dispersion.
Failure to comply with the major of respondents with relevant subject and as a result less cooperation of some of the samples to respond the questionnaire.

The lack of detailed documentation of research purposes as well as lack of access to recorded information is considered the limitations of this study.
The data collection tool is a questionnaire that assesses respondents' attitudes, so is associated with inherent limitations.
Insufficient time to test the results of this research in other similar organizations.

References